Syllabus

Unit I

Definition, Characterization of distributed systems - Trends in distributed systems, Focus on resource sharing, Challenges. Types of distributed systems. System Models - Introduction, Physical models, Architectural models, Fundamental models

(Colouris, George, Jean Dollimore, and Tim Kindberg. "Distributed Systems: Concepts and Design Edition 3." (2001). Covers the Whole of UNIT I. In Book Chapters 1 and 2.)

Unit II

Introduction to middleware,

Fundamentals of Communication, Basic RPC Operation, Parameter Passing, Asynchronous RPC, Message Oriented Communication, Stream Oriented Communication, Multicast Communication RMI - Introduction, Request-reply protocols, Remote method invocation.

.**(Andrew S.Tanenbaum Maarten Van Steen. "Distributed systems principles and paradigms." Chapter 4)**

Unit III

Introduction, Roots of Cloud Computing: From mainframe to Cloud, Benefits of Cloud Computing SOA, Web services, Role of Networks in Cloud Computing: Cloud types and service models, Primary Cloud Service models, Cloud Services brokerage, Primary cloud deployment models, cloud computing reference model, The greenfield and brownfield deployment options, SLAs

(chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://dhoto.lecturer.pens.ac.id/lecture_notes/internet_of_things/CLOUD%20COMPUTING%20Principles%20and%20Paradigms.pdf)

(Cloud Computing: Architecting Next-Gen Transformation Paradigms, 4th Edition, Author: Dr. Kumar Saurabh,)

Unit IV

Understanding Virtualization: Virtualization, Concept of Hypervisor, Types of Hypervisor, Taxonomy of Virtualization, Virtualization and machine

reference model, Hardware virtualization techniques, Pros and Cons of Virtualization, Live migration, Technology examples: Xen, KVM, VMware, Microsoft Hyper-V. Cloud Platforms : AWS, Microsoft Azure, Google Cloud Platform, Architecture, services offered.

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://dhoto.lecturer.pens.ac.id/lecture_notes/internet_of_things/CLOUD%20COMPUTING%20Principles%20and%20Paradigms.pdf)

(Cloud Computing: Architecting Next-Gen Transformation Paradigms, 4th Edition, Author: Dr. Kumar Saurabh,)

Also, refer to the document shared with you.

These are reference books ...not restricted to this you can refer to any other reference books.

Thanks and Regards

Dr. Aparna Ashok Kamble